

Test Report

Aim of study: -To determine the antiviral property of Ionosil.

Procedure:

5 liters of normal tap water is spiked with virus (MS2) at a concentration of 1×10^5 pfu/100ml, then the water was dispersed in to 5 bottles of 1liter each, to which Ionosil was added in volumes of 10, 20 ,40,& 80 ml.

Remaining one bottle was used as blank. These bottles are mixed well and allowed to stand for one hour. Then the sample was analyzed virus removal rate as per Method EPA: 1602 Coliphage in water by single agar layer. The results are tabulated below.

COLI PHAGE REMOVAL RATE

S.NO	SAMPLES	PFU/100 ML	% Of removal after 1 hour contact time
1	Spiked water	42 000	-
2	10 ml Ionosil	6 200	85.238
3	20 ml Ionosil	1 900	95.476
4	40 ml Ionosil	1 200	97.142
5	80 ml Ionosil	300	99.285

Property of tap water used in experiment:

Parameters	Units	Value
pH		6.4
Conductivity	uS/cm	195
Temperature	t°C	27-28
TDS	mg/L	130
Turbidity	NTU	0.3
Alkalinity	mg/L as CaCO ₃	70
Total Hardness	mg/L	78

Analyst



Lab executive

